

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

17540	9528
EXAM	INER
LOPEZ, F	RANK D
ART UNIT	PAPER NUMBER
3745	
	LOPEZ, F

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		$\mathcal{C}$		
	Application No.	Applicant(s)		
Office Action Summary	10/811,042	LECH ET AL.		
	Examiner	Art Unit		
	F. Daniel Lopez	3745		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING IT  Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period.  Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO  .136(a). In no event, however, may a reply be tild d will apply and will expire SIX (6) MONTHS from tte, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).		
Status				
1) Responsive to communication(s) filed on <u>Aug</u> 2a) This action is <b>FINAL</b> . 2b) This action for allowed closed in accordance with the practice under	is action is non-final.  ance except for formal matters, pre			
Disposition of Claims				
4) Claim(s) 1-4,6-12,15 and 16 is/are pending in 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed.  6) Claim(s) 1-4,6-12,15 and 16 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/	awn from consideration.			
Application Papers				
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) ac Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct  11) The oath or declaration is objected to by the Examin	cepted or b) objected to by the edrawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat* * See the attached detailed Office action for a list	nts have been received.  Its have been received in Applicat ority documents have been received in Applicat (PCT Rule 17.2(a)).	ion No ed in this National Stage		
Attachment(s)        Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)		
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate		

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

Page 2

### Response to Amendment

Applicant's arguments filed August 8, 2006, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims 1-4, 6-12, 15 and 16 have been considered but are deemed to be moot in view of the new grounds of rejection. The new grounds of rejection are necessitated by the limitations added to claims 1 and 9.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### Claim Rejections - 35 USC § 112

Claims 7 and 8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7 line 1 "a second fixed displacement pump" is confusing, since claim 1 claims "a second…pump" (line 7). Suggest that claim7 is changed to be –said second pump is a fixed displacement pump--.

In claim 8 line 1-2 "a reloader valve coupled to and between the second pump and the plurality of closed center valve" should be deleted, since it repeats the limitation of claim 1 line 7-8.

## Claim Rejections - 35 USC § 103

Claims 1-4, 6-12, 15 and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Lech (5,471,908) in view of Lech et al (5,413,452) and Johnston. Lech discloses a hydraulic system (e.g. fig 6) for a work vehicle comprising a priority valve (125) communicating with a first fixed displacement pump (53) and distributing flow to primary (connected to line 119) and secondary outlets, controlled by steering load and load of swing valve (via 131); with a steering valve (65) and a plurality of first valves (121, 123, 91), including a boom swing valve (73a) connected to the primary outlet and a plurality of open center valves (25a), including a loader bucket valve (60a) connected to the secondary outlet; wherein the priority valve is responsive to a load (via 131) of the plurality of first valves; a second fixed displacement pump (51) providing fluid to the plurality of first valves; but does not disclose that the plurality of first valves are closed

center valves; or that the first and second pumps are gear pumps; or that a reloader valve between the second pump and the closed center valves and responsive to a load signal on a load signal line coupled to the closed center valves, and responsive to some loads that control the priority valve and independent of other loads that control the priority valve. Note that "reloader" is considered a name only and not considered to have any intrinsic limitation.

Lech et al teaches, for a hydraulic system for a work vehicle comprising a priority valve (86) communicating with a first fixed displacement pump (48) and distributing flow to primary (connected to line 88) and secondary outlets; with a plurality of first valves, including a steering valve (136) and a boom swing valve (74) connected to the primary outlet and a plurality of open center valves (51, 55, 59), including a loader bucket valve (51) connected to the secondary outlet; wherein the priority valve is responsive to a load (via 104) of the plurality of first valves; that the boom swing valve is a closed center valve.

Since Lech does not disclose whether the plurality of first valves are open or closed center vales, since Lech et al discloses the boom swing valve, which is one of the plurality of first valves, is a closed center valve, and since the plurality of first valves control actuators similar to the boom swing valve; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the plurality of first valves of Lech closed center valve, as taught by Lech et al, as a matter of engineering expediency.

Johnston teaches, for a hydraulic system for a work vehicle comprising first and second fixed displacement pumps (44, 42) providing fluid to a plurality of first valves (50); that a reloader valve (48) is located between the second pump and the first valves and responsive to a load signal on a load signal line (via 106, 108) coupled to the first valves, for the purpose of decreasing energy use (e.g. column 1 line 23-30).

Since Lech and Johnston are both from the same field of endeavor, the purpose disclosed by Johnston would have been recognized in the pertinent art of Lech. It would have been obvious at the time the invention was made to one having ordinary skill in the art to locate a reloader valve between the second pump and the closed center valves of Lech and responsive to a load signal on a load signal line coupled to the closed center

Application/Control Number: 10/811,042 Page 4

Art Unit: 3745

valves, as taught by Johnston, for the purpose of decreasing energy use. Note that since the reloader valve feeds all but the steering valve, it is controlled by the load of the swing valve (among other valves), but not the steering valve.

Official notice is taken that gear pumps are well known fixed displacement hydraulic pumps. It would have been obvious at the time the invention was made to one having ordinary skill in the art to make the fixed displacement pumps of Lech gear pumps, as a matter of engineering expediency.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

F. Daniel Lopez Primary Examiner Art Unit 3745 October 15, 2006